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4500-09-AE-QP

January 31, 1992

Wayde M. Hartwick
Remedial Project Manager
Mail Code HSRL-6J
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Preferred Remedy
American Chemical Services NPL Site
Griffith, Indiana

Dear Mr. Hartwick:

As we have discussed on many occasions, the American Chemical Services (ACS) PRP Steering Committee (Steering Committee) believes that the implementation of Alternative 5 as described in the Final Draft Feasibility Study (FS) dated October 23, 1991 would be the most appropriate remedy for the ACS site. This letter summarizes the reasons for selecting Alternative 5 and requests that members of the Steering Committee have the opportunity to meet with you prior to the U.S. EPA selection of a proposed plan for the site. This letter is written with the concurrence of the technical subcommittee of the steering committee.

BACKGROUND

We understand that the U.S. EPA is currently considering the development of the proposed plan for the remediation of the ACS site. In our meeting at your office on December 20, 1991, you stated that the U.S. EPA is favoring either Alternative 5 or Alternative 6. Both alternatives consist of installing a groundwater pumping and treatment system, and in-situ vapor extraction of contaminated soils at site. The alternatives differ in how waste at the site will be addressed. In Alternative 5, wastes would be treated with vapor extraction. In Alternative 6, wastes would be treated with onsite low temperature thermal treatment.

The Indiana Department of Environmental Management (IDEM) has recommended Alternative 5 as the preferred alternative in a letter from Mr. Reggie Baker Jr., Chief of the Superfund Section, to you dated December 6, 1991. The letter stated that IDEM "staff reviewed and compared the eight (8) alternative

THE PERFECT BALANCE
BETWEEN TECHNOLOGY
AND CREATIVITY

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remediation methods. Alternatives #5 and #6 were distinguished as the most appropriate remediation methods." Later in the letter IDEM stated "We recommend #5 as the preferred alternative. This recommendation was based on the belief that on-site incineration (Alternative 6) would not be publicly accepted." Representatives of the Town of Griffith on the Steering Committee have confirmed that incineration would not be acceptable to the public.

Based on discussions we had on January 27, 1992, we understand that the U.S. EPA oversight contractor, Roy F. Weston (Weston), may be recommending Alternative 6. Apparently Weston favors Alternative 6 because they believe that low temperature thermal treatment is more effective than vapor extraction in treating semivolatile organic compounds (SVOC). However, you stated that Weston may be willing to recommend Alternative 5 if the proposed plan was more specific on the actions that would be taken if pilot scale testing of vapor extraction of waste shows that the technology is not effective.

IMPLEMENTATION OF ALTERNATIVE 5

As stated above, the only real difference in Alternatives 5 and 6 is the methodology for treatment of waste at the site. The FS shows that the wastes at the ACS Site contain elevated concentrations of a large number of contaminants including VOC, SVOC and metals. Vapor extraction is a proven technology for many of the contaminants. However, because of the wide range and high concentrations of contaminants, significant bench and pilot scale testing will be required of whatever treatment technology is selected to address wastes at the Site. Alternative 5 has the significant advantage that the treatment of waste would use the same treatment technology that U.S. EPA, IDEM and Weston find is appropriate for contaminated soils at the site. Because a full scale vapor extraction system will be constructed to treat contaminated soils, a large scale field test to provide design data for vapor extraction treatment of waste could be conducted at relatively low cost. The field test could also be conducted without the attendant delays of developing wholly independent pilot scale testing of another treatment technology. The field testing program would be implemented as follows:

- The first step in the remediation process would be the installation of the groundwater pumping and treatment system. Once installed, the primary migration pathway from the site would be eliminated.

- The installation of the vapor extraction system for treatment of contaminated soils would begin concurrent with installation of the pump and treat system. This system would be installed in the zone of contaminated soils which essentially surround the waste areas at the site.

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The system would include the vapor extraction wells, connecting pipes, blowers and vapor treatment system.

- A small section in one of the waste areas would be designated for use in a large scale test of vapor extraction of waste. A small number of wells would be installed in this waste area and the wells would be connected to the vapor treatment system for the contaminated soils.

- The large scale field test would be operated for one to two years. Sampling and analysis of waste samples and extraction gases would be conducted on a periodic basis to determine the design criteria for construction of the full scale system. Based on the design data, wells would be installed in the remainder of the waste areas and additional vapor treatment units would be installed.

- If problems are encountered during the field test program, appropriate modifications could be developed prior to installation of a full scale system. In the extreme case, alternative treatment technologies could be considered.

PRP STEERING COMMITTEE AND TECHNICAL SUBCOMMITTEE RECOMMENDATION

The PRP Steering Committee believes that Alternative 5 is the most appropriate remedy at be the ACS Site because:

- Alternative 5 provides the best balance of reducing both actual and potential risks at the site. Because of the large volume of volatile organic compounds (VOC) at the site, excavation of waste would result in the release of VOCs to the atmosphere. In hot weather, volatilization would be very difficult to both predict and control. In addition, the drums and waste at the site were disposed of in a random fashion. Although the contaminants appear to be in an equilibrium state now, excavation could cause mixing of incompatible wastes with resulting risk to workers and residents in the area.

- With Alternative 5, the most mobile contaminants (VOCs) in the waste and soil would be removed in-situ so that workers or residents would not be exposed to risk. The residual concentrations of SVOC and metals that would remain in the waste after treatment with vapor extraction would only present a risk if the wastes were to be excavated at some time in the future. This potential for risk needs to be balanced by the real risks that

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would occur if the wastes were excavated for low temperature thermal treatment.

- There is likely to be significant public opposition to low temperature thermal treatment or incineration of buried waste (Alternative 6). This opposition could easily delay the implementation of the remedy at the site by many years. It is expected that there would be little public opposition to the implementation of Alternative 5 because the work at the site would be conducted under much more controlled conditions.

- Significant bench and pilot scale testing will be required for whatever treatment technology is selected to address wastes at the Site. Because the contaminated soils at the site will be treated with vapor extraction, a large scale field test could be conducted at relatively low cost.

- With Alternative 5, the opportunity exists to develop design criteria for treating the waste with vapor extraction without exposing workers or residents to excavated materials.

- Alternative 5 provides for vapor extraction to be rigorously tested for effectiveness in treating wastes at the site. The FS shows that successful implementation of vapor extraction of waste could save as much as $5 million in cleanup costs. With Alternative 5, higher cost technologies would be considered only if other reasonable lower cost technologies were proven ineffective.

- The treatment of contaminated soils and groundwater at the site will be conducted over a 30 year period. Therefore, the implementation of a several year long large scale field test will not extend the overall site cleanup schedule.

CLOSURE

We trust that the above discussion will assist the U.S. EPA with reaching accord with the PRPs on the proposed plan for the site. We request that a meeting among the PRPs, Warzyn and U.S. EPA be scheduled to discuss this at your convenience. It may be appropriate to have representatives from Weston attend the meeting.

United States Environmental Protection Agency
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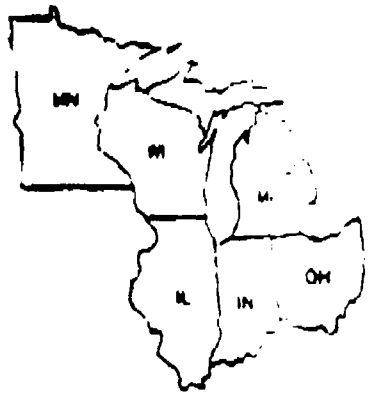
77 West Jackson Boulevard
Chicago, Illinois 60604

Waste Management Division
Office of Superfund



Facsimile Cover Sheet
Panafax UF-640
Telephone Number
FTS: 886-4071
COMM: 312-886-4071

To: JIM BURTON

Office phone: 708 918 4039 Machine No: 708 918-4045

From: WAYDE HARTWICK

Office phone: 312 886-7067 Office code:

Date: 2/3/92 Number of pages, including cover: 6

Message: JIM.

GIVE ME A CALL TOMORROW, AFTER YOU'VE HAD TIME TO DIGEST THIS, AND LET ME KNOW WHAT YOU THINK. THANKS.

Signature:

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I will give you a call in the next few days to discuss this letter. In the meantime, if you have any questions, please give me a call.

Sincerely,

WARZYN INC.

Joseph D. Adams Jr., P.E.
Vice President

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